

# Case Report

## Efficacy of Myofascial Unwinding and Myofascial Release Technique in a Patient with Somatic Symptoms – A Case Report

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### ABSTRACT

Depression is an aversion to activity disorder which could lead to somatic dysfunctions such as insomnia, excessive sleeping, body aches, listlessness, and irritable bowel syndrome. The World Health Organization has projected the depression to be the second leading cause of disability worldwide by 2020. The physical and mental ill effects of somatic depression can be addressed using the osteopathic manipulative treatment. Therefore, the purpose of the present case report is to explore the effect of myofascial release (MFR) technique and myofascial unwinding (MFU) in the somatic depression. We reported a case of a 39-year-old female diagnosed as dysthymia with moderate depression with somatic symptoms. She was treated with MFR and MFU for 4 weeks. Depression was scored using Hamilton Depression Rating Scale (HDRS), and quality of life was measured using the Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form (Q-LES-Q-SF). Both were administered preintervention and 6 weeks postintervention. The application of MFR and MFU resulted in the improved scores on both HDRS and Q-LES-Q-SF. The present case positive results have proven the effectiveness of MFR and MFU as an important adjunctive treatment strategy.

**Key words:** Depression, dysthymia, myofascial release, myofascial unwinding, osteopathy, somatic symptoms

### INTRODUCTION

Depression is an aversion to activity disorder which is characterized by low mood, feelings of sadness, loneliness, anxiety, loss of appetite, or overeating;<sup>[1]</sup> that could lead to somatic dysfunctions such as insomnia, excessive sleeping, body aches, listlessness, and irritable bowel syndrome.<sup>[2]</sup>

The management of somatic symptoms is based on psychiatric medications, counseling, multiple behavioral therapy, cognitive behavioral therapy, and osteopathic manipulative treatment (OMT), respectively.<sup>[3]</sup> The physical and mental ill effects of somatic depression

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can be addressed using the OMT, namely, myofascial release (MFR) techniques and somatoemotional release technique called fascial unwinding.<sup>[4]</sup>

MFR is the application of a low load, long duration stretch to the myofascial complex, intended to restore optimal length, decrease pain, and improve function.<sup>[5]</sup>

Myofascial unwinding (MFU) also called as indirect MFR technique is defined as “a manual technique involving constant feedback to the osteopathic practitioner who is passively moving a portion of the patient’s body in response to the sensation of movement. Its forces are localized using the sensations of ease and bind over wider regions.”<sup>[6]</sup>

“The psychobehavioral model of OMT seeks to influence mental and emotional conditions, particularly stress and anxiety, by targeting associated anatomical locations.”<sup>[7]</sup> Therefore, the purpose of the present case report is to explore the effect of MFR and MFU in the somatic depression.

Depression was scored using Hamilton Depression Rating Scale (HDRS). The quality of life was measured using the Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form (Q-LES-Q-SF). The quality of life score in percentage was measured using the formula:<sup>[8]</sup>

Raw total score = minimum score/maximum possible raw score – minimum score (where minimum score is 14, and the maximum score is 70).

## CASE REPORT

A 39-year-old homemaker presented with the complaint of low mood, loss of interest in daily activities, palpitations, fatigability, decrease appetite, middle insomnia, body aches, and listlessness for the last 3 years. She reported worsening of symptoms for the last 2 months.

The patient had no significant medical and surgical history.

She had been previously treated with mirtazapine 15 mg/day, clonazepam 0.25 mg/day, proton pump inhibitors, and nonsteroidal anti-inflammatory drugs but without any persistent relief.

Routine blood investigations were normal within normal range.

## Diagnosis

Dysthymia; moderate depression with somatic symptoms.

## Treatment

The patient was prescribed tablet opipramol 100 mg BD for 15 days along with tablet etizolam 0.5 mg thrice in a day. Along with the pharmacotherapy, the patient also underwent osteopathic assessment and treatment. Tablet opipramol was tapered to 50 mg BD, and tablet etizolam was tapered to 0.5 mg BD.

Osteopathic palpatory examination demonstrated restricted motion at the sacral base, lambdoidal and sagittal sutures, dural mobility, and asymmetrical and reduced diaphragmatic motion in the hypogastric and epigastric regions, respectively. The restricted range of motion and tenderness were also present in the anterior chest and neck.

## Osteopathic treatment

The clinical examination based osteopathic treatment was provided to the patient for 20 min 3 times/week on alternate basis for 4 weeks (total, 12 sessions). The patient underwent osteopathic manipulative approach, consisting of all the major diaphragms’ release, namely, pelvic diaphragm, abdominal diaphragm, thoracic outlet release, and hyoid diaphragm release along with anterior cervical fascia release, occipitoatlantal release, and sacral release. The dural tube rocking was incorporated to influence the craniosacral mobility. The somatoemotional component was targeted using the MFU by lifting and holding the patient’s head to remove the influence of the gravity and move into the direction of ease.

The remarkable change in the patient variable was noticed after the completion of the treatment sessions [Table 1].

The follow-up at 6 weeks interval showed improvement in both the quality of life and also the HDRS score. The pharmacological treatment prescribed at 6 weeks follow-up: Tablet opipramol was tapered to 50 mg BD and tablet etizolam 0.5 mg on s.o.s basis.

## DISCUSSION

The findings procured from the present case report significantly improved the Q-LES-Q-SF and HDRS score as evident from Table 1, with the use of MFR and MFU as an adjunct to pharmacotherapy. This may be attributed to the release of the fascial restrictions both at the physical and emotional levels, respectively.

**Table 1: Pre-treatment and Post-treatment Score of Q-LES-Q-SF and HDRS**

Variable	Prescore (baseline)	Postscore (after 6 weeks)
Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form (%)	55	30
Hamilton Depression Rating Scale	22	12

MFR is an effective treatment to relax the fascia throughout the whole body, which leads to decrease in pain, improve range of motion, better posture, reduced symptoms, and improved quality of life.<sup>[9]</sup> Alteration in the adrenocorticotrophic and decrease in the serotonin levels indicating the neurohormonal axis changes leading to decreased sleep and sadness has been reported in the patients with somatic depression.<sup>[10,11]</sup> MFR at the pelvic diaphragm level may induce sleep by improving the serotonin secretions by platelets. Anxiety and stress levels hamper the mechanical properties of the fascial tissue by affecting the proteoglycans synthesis and metabolism, leading to the formulation of the fascial entrapment areas and hence, the painful points emergence.<sup>[12]</sup>

MFU mechanism is built on the theories of neurobiologic,<sup>[13,14]</sup> ideomotor functions,<sup>[15]</sup> and consciousness.<sup>[16]</sup> “In bodywork literature, it is generally accepted that fascia or connective tissues can hold onto memories and trauma.”<sup>[17]</sup> “Ideomotor actions are unconscious, involuntary movements that are performed by a person and that may be caused by prior expectations, suggestions, or preconceptions.”<sup>[4]</sup> Ideomotor action leads to improvement in the pain intensity and disability due to suppressed instinctive responses in the patients as hypothesized by McCarthy *et al.*<sup>[18]</sup> MFR stimulates the intrafascial mechanoreceptors whose signals are processed by the central nervous system and the autonomic nervous system, thus triggering the unwinding process. MFU as per the neurobiologic theory stimulates the parasympathetic nervous system and leads to the release of tissue emotions.<sup>[19]</sup>

## CONCLUSION

This study suggests that MFR and MFU methods provide relief from the somatic symptoms and could be important therapeutic tools to lessen the impact of the disease and to thus improve the quality of life. MFR and MFU osteopathic techniques can be considered as a complementary therapy in addition to the pharmacotherapy and other adjunct therapies in the treatment of somatic symptoms.

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## Conflicts of interest

There are no conflicts of interest.

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